FIGURE 2C

ROCKVILLE (LEAF #1) : INSTITUTIONS, FUNDING & EMPLOYERS | FILTER LOGIC FOR LIST TOOL

AGENCIES & COMPANIES (R1) (109A-R1-#77/78)
→ LIST OF COMPANY/ AGENCY TYPES: 109A-R1-#75
→ LIST OF CO/AGENCY EMPLOYEE SIZE CHOICES: 109A-R1-#76
→ STATE FILTER OPTIONS 1. LIST OF ALL STATES 2. LIST OF REGIONS - LIST OF SUB- REGIONS–STATES 109A-R6-#83&84
→ ALPH. LIST OF STATE LOCATION CHOICES: 1. STATE COUNTIES 109A-P4-#102 2. STATE CITIES 109A-R6-#85
→ **FINAL AGENCIES & COMP. LIST**

INDUSTRIES (R2) (109A-1C-#4)
→ FILTER OPTIONS 1. ALPHABETICAL 2. LIST OF REGIONS 109A-R6-#83
→ LIST OF US SUB- REGIONS 109A-R6-#83
→ LIST OF STATE IN CHOSEN SUB- REGION (S) 109A-R6-#83&84
→ ALPH. LIST OF STATE LOCATION CHOICES: STATE COUNTIES 109A-P4-#102
→ ALPH. LIST OF CITY LOCATION CHOICES: COUNTIES/CITIES 109A-R6-#102
→ **FINAL INDUSTRIES LIST**

ENG. DISCIPLINES (R3) (109A-1I-D-#11)
→ LIST OF ENG. DISCIPLINES (ALPHABETICALLY) (109A-1I-D-#11)
→ **FINAL ENG. DISCIPLINES LIST**

COLLEGES (R4) (109A-11A-C- #65/-D-#66)
→ LIST OF COLLEGE TYPES: 109A-R4-#79
→ LIST OF COLLEGE SIZE CHOICES: 109A-R4-#80
→ STATE FILTER OPTIONS 1. LIST OF ALL STATES 2. LIST OF REGIONS -LIST OF SUB- REGIONS – STATES 109A-R6-#83&84
→ ALPH. LIST OF STATE LOCATION CHOICES: 1. STATE COUNTIES 109A-P4-#102 2. STATE CITIES 109A-R6-#85
→ **FINAL COLLEGES LIST**

FIN. RESOURCES (R5) (109A-8A-#53)
→ LIST OF FINANCIAL RESOURCE OPTIONS: 109A-R5-#81
→ LIST OF FINANCIAL AID TYPES FOR CHOSEN OPTION (S): 109A-R5-#82
→ STATE FILTER OPTIONS 1. LIST OF ALL STATES 2. LIST OF REGIONS - LIST OF SUB- REGIONS – STATES 109A-R6-#83&84
→ ALPH. LIST OF STATE LOCATION CHOICES: 1. STATE COUNTIES 109A-P4-#102 2. STATE CITIES 109A-R6-#85
→ **FINAL FIN. RESOURCES LIST**

GEOG. LOC. (R6) (CITIES OR COUNTIES OR STATES (SUB) REGNS IF CITIES (103A-R6-#85)
→ LIST OF US REGIONS 109A-R6-#83
→ LIST OF US SUB- REGIONS 109A-R6-#83
→ LIST OF STATES IN CHOSEN SUB- REGION (S) 109A-R6-#83&84
→ ALPH. LIST OF STATE LOCATION CHOICES: STATE COUNTIES 109A-P4-#102
→ **FINAL GEOGRAPHIC LOCATIONS LIST**

FIGURE 2F

ALLENTOWN (LEAF #4):   **CURRICULA & COURSES**   **FILTER LOGIC FOR LIST TOOL**

CURRICULA (A1)
(109A-10A-#62)
(109A-A1-#105)

LIST OF COLLEGE TYPES:
109A-A1-#104

LIST OF COLLEGE SIZE CHOICES:
109A-R4-#80

STATE FILTER OPTIONS
1. LIST OF ALL STATES
2. LIST OF REGIONS
-LIST OF SUB-REGIONS-STATES
109A-R6-#83&84

ALPH. LIST OF STATE LOCATION CHOICES:
1. STATE COUNITES
109A-P4-#102
2. STATE CITIES
109A-R6-#85

FINAL CURRICULA LIST

COURSE TYPES (A2)
(109A-11A-A-#63)

LIST OF COLLEGE COURSE TYPES
1. ALPHABETICALLY
109A-11A-A-#63
2. BY PROGRAM TYPE
109A-7A-#49

FINAL COURSE TYPES LIST

COURSE (A3)
(109A-A3-#108)
(109A-A3-#110)
(109A-11A-E-#67)

LIST OF COLLEGE TYPES:
109A-A3-#108

LIST OF COLLEGE SIZE CHOICES:
109A-R4-#80

STATE FILTER OPTIONS
1. LIST OF ALL STATES
2. LIST OF REGIONS
-LIST OF SUB-REGIONS-STATES
109A-R6-#83&84

ALPH. LIST OF STATES LOCATION CHOICES:
1. STATE COUNITES
109A-P4-#102
2. STATE CITIES
109A-R6-#85

ALPHABETICAL LIST OF CURRICULUM
109A-A3-#107
109A-10A-#62

FINAL COURSE LIST

COURSE TUTORING (A4)
(109A-A4-#111)
(109A-A4-#112)

STATE FILTER OPTIONS
1. LIST OF ALL STATES
2. LIST OF REGIONS
-LIST OF SUB-REGIONS-STATES
109A-R6-#83&84

ALPH. LIST OF STATE LOCATION CHOICES:
1. STATE COUNITES
109A-P4-#102
2. STATE CITIES
109A-R6-#85

ALPHABETICAL LIST OF CURRICULA
109A-A4-#109
109A-10A-#62

ALPHABETICAL LIST OF COURSE
109A-A3-#108
109A-A4-#110
109A-11A-E-#67

FINAL COURSE TUTORING LIST

GEOG. LOC. (R6)
(CITIES OR COUNTIES OR STATES OR (SUB) REGNS IF CITIES (109A-R6-#85)

LIST OF US REGIONS
109A-R6-#83

LIST OF US SUB-REGIONS
109A-R6-#83

LIST OF STATES IN CHOSEN SUB-REGION (S)
109A-R6-#83&84

ALPH. LIST OF STATE LOCATION CHOICES:
STATE COUNITES
109A-P4-#102

FINAL GEOG. LOC. LIST

FIGURE 2G

PathhFinder::E: Logic for Data Relationships – College Level-Scenario #109A

7/1/03

| Curricular Design | Blacksburg |

B-X
Curricula Exploration & Design

| Curricula & Courses | Allentown |

A-1 Curricula [17]

A-2 Course Types [18]

A-3 Courses [19]

A-4 Info. on Course Tutoring [20]

| Programs & Standards | Plzen |

P-1 Program Types [12]

P-2 College Programs [13]

P-3 Distance/Online Programs [14]

P-4 Secondary School Standards [15]

P-5 Coll. Entrance Testing [16]

| Pursuits | Cambridge |

C-1 Internships and Co-Ops [7]

C-2 Links: Employment Opportunities; Job Banks [8]

C-3 Descriptions; Job Functions & Occupations [9]

C-4 Engnring Careers [10]

C-5 Strategies for Employment [11]

RCPA-GL Geog Locations [6]

| Institn; Funding; Employers | Rockville |

R-1 Company Gov/ Agencies [1]

R-2 Industries [2]

R-3 Engineering Discipline [3]

R-4 Colleges [4]

R-5 Financial Resources [5]

FIGURE 3B

300

APPLICATION OVERVIEW 2

305

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LIST TOOL

DETAIL WINDOW

310

311

HISTORY

BASKET

312

313

FILTERING ALGORITHM

314

MULTIMEDIA INTEGRATOR

316

DATABASE LOGIC

315

317

318

DATABASE

MULTIMEDIA FILES

FIGURE 11A

PathFinder

○○○●●●Engineering | Explore | Job Market | Curriculum Designer

Virginia Polytechnic Institute

Aerospace Engineering

Curricular Standards

	Status
Participation in math & science clubs and fairs in HS	✓
Familiarity with and possession of a personal computer	✗
SAT scores	✓
High school GPA	✓

Curricular Prerequisites

H.S. Chemistry	✓
Pre-Calculus	✓
H.S. Biology	✓
Algebra II/Trig.	✗
H.S. English	✓

	Grade	Credits
Sem 1 - Fall 2002 - $10,557 [+] [-]	Input Grades	18
General Chemistry I		3
General Chemistry Laboratory I		3
Introduction To Engineering I		3
Freshman English I		3
Calculus I		3
Elementary Linear Algebra		3

Sem 2 - Spring 2003 - $10,557 [+] [-]		18
Introduction To Engineering II		3
Freshman English II		3
Calculus II		3
Vector Geometry		3
Foundations Of Physics I		3

(►More)

Familiarity with and possession of a personal computer

All entering students are required to have a personal computer. The engineering curriculum emphasizes the use of computers in the analysis and solution of engineering problems. Detailed specifications on the type of computer required differ from the rest of the university, and are announced by the college in late spring.

For more information, visit the engineering web site at http://www.eng.vt.edu/compreq/index.html.

▼ **How To Meet This Curricular Standard**

Computer Form Factor	Notebook—Not a Slate form of Tablet PC
Processor/Processor Speed	*Intel Pentium 4M or Pentium-M (or equivalent processor) with a clock frequency of 1.40GHz +
Operating system	Windows XP Professional
Memory	512MB on Single DIMM
Hard Drive	40 Gigabytes
Video Card	16MB or greater
Optical Device Options	DVD+R or DVD-R or DVD/CDRW
Network Card	10/100 Mbit Ethernet Card and 802.1 fb Wireless Interface
Modem	56Kb Modem that uses the V.90 Standard. Winmodems are not acceptable
Input/Output	USB, Serial and Parallel
File System	NTFS
Warranty	Recommended 3 Year
Software	Students are required to purchase the Engineering Student Software Bundle. This bundle offers over $1500 worth of software for around $500. Information on the bundle, pricing and pickup can be found at the software purchasing site.

▲ **Other Useful Information**

[Placement Testing] [Intelligent Tutor]

◄ Explore Related...

GPA: 3.68   Cost: $46,536   Credits: 19/120

◄ **EXIT PATHFINDER** | *Petr Sedy* | **SELECT PATH**   Current Path Name   [Select ▼]   ▲   **MANAGE PATHS**   [Articulate]

FIGURE 11B

PathFinder

○○○●●Engineering | Explore | Job Market | Curriculum Designer

Virginia Polytechnic Institute
Aerospace Engineering

Curricular Standards

	Status
Participation in math & science clubs and fairs in HS	✓
Familiarity with and possession of a personal computer	✓
SAT scores	✓
High school GPA	✓

Curricular Prerequisites

H.S. Chemistry	✓
Pre-Calculus	✓
H.S. Biology	✓
▶ Algebra II/Trig.	X
H.S. English	✓

		Grade	Credits
Semester 1 Fall 2002	[+] [-]	Input Grades	**18**
General Chemistry I			3
General Chemistry Laboratory I			4
Introduction To Engineering I			4
Freshman English I			2
Calculus I			3
Elementary Linear Algebra			3
Semester 2 Spring 2003	[+] [-]		**18**
Introduction To Engineering II			3
Freshman English II			3
Calculus II			3

GPA: 3.68   Cost: $46,536   Credits: 19/120   (▶More)

Algebra II/Trig.

All entering students are required to have a personal computer. The engineering curriculum emphasizes the use of computers in the analysis and solution of engineering problems. Detailed specifications on the type of computer required differ from the rest of the university, and are announced by the college in late spring. For more information, visit the engineering web site at www.eng.vt.edu/compreq/index.html.

How To Meet This Curricular Prerequisite Algebra II / Trig.

Other Useful Information

[Placement Testing]   [Intelligent Tutor]

◀ Explore Related...   [Select ▼]   [Articulate]

Petr Sedy | *SELECT PATH* | Current Path Name [▼] [▲] | *MANAGE PATHS*

▲ *EXIT PATHFINDER*

FIGURE 11C

PathFinder

○○○●● Engineering	Explore	Job Market	Curriculum Designer

Virginia Polytechnic Institute

Aerospace Engineering

Elementary Linear Algebra

Curricular Standards — Status

	Status
Participation in math & science clubs and fairs in HS	✓
Familiarity with and possession of a personal computer	✓
SAT scores	✓
High school GPA	✓

Course Co- and Pre- Requisites:

Pre-Calculus	Met
H.S. Biology	Waived
X Algebra II/Trig.	UNMET Replace Elementary Linear Algebra with this Algebra II/Trig?

☐ YES ☐ NO

Course Objectives:

This course introduces the student to the basic concepts of linear algebra and includes the following topics: systematic solution of linear systems and Gaussian elimination, basic matrix algebra, vectors in two- and three-dimensional space, and eigenvalue problems.

Curricular Prerequisites

H.S. Chemistry	✓
Pre-Calculus	✓
H.S. Biology	✓
Algebra II/Trig.	X
H.S. English	✓

Course Expected Outcomes:

- To be familiar with solving linear systems
- To be able to reduce matrices using Gaussian elimination
- Solving matrices with basic matrix algebra
- Evaluating vectors in two and three dimensional space
- Competency to solve eigenvalue problems

Grade Credits

Sem 1 - Fall 2002 - $10,557	[+] [-]	Input Grades	18
General Chemistry I			3
General Chemistry Laboratory I			3
Introduction To Engineering I			3
Freshman English I			3
Calculus I			3
▸ Elementary Linear Algebra			3

Sem 2 - Spring 2003 - $10,557	[+] [-]		18
Introduction To Engineering II			3
Freshman English II			3

▸More

GPA: 3.68   Cost: $46,536   Credits: 19/120

▸ Course Syllabus
▸ Course Coverage Schedule
▸ Course Resources
▸ History of Student Performance
▸ Archive of Student Reviews
▸ Other Pertinent Information

Placement Testing	Intelligent Tutor

↰ Explore Related...

Petr Sedy	SELECT PATH	Current Path Name	Select ▾	▴	Articulate

▾ EXIT PATHFINDER   MANAGE PATHS

FIGURE 11D

PathFinder

ooo●● Engineering | Explore | Job Market | Curriculum Designer

Virginia Polytechnic Institute
Aerospace Engineering

Algebra II/Trigonometry

	Status
Curricular Standards	
Participation in math & science clubs and fairs in HS	√
Familiarity with and possession of a personal computer	√
SAT scores	√
High school GPA	√
Curricular Prerequisites	
H.S. Chemistry	√
Pre-Calculus	√
H.S. Biology	√
Algebra II/Trig.	√
H.S. English	√

Grade Credits

		Input Grades	18
Sem 1 – Fall 2002 - $10,557	+	-	
General Chemistry I			3
General Chemistry Laboratory I			3
Introduction To Engineering I			3
Freshman English I			3
Calculus I			3
▶ Algebra II/Trig.			17
Sem 2 - Spring 2003 - $10,557	+	-	
Introduction To Engineering II			3
Freshman English II			4

▶More

GPA: 3.68   Cost: $46,536   Credits: 19/120

Course Description:
Euclidean vectors, complex numbers, and topics in linear algebra including linear systems, matrices, determinants, eigenvalues, and bases in Euclidean space.

Course Objectives:

Course Expected Outcomes:

Course Co- and Pre-Requisites:

▶ Course Syllabus
▶ Course Coverage Schedule
▶ Course Resources
▶ History of Student Performance
▶ Archive of Student Reviews
▶ Other Pertinent Information

Placement Testing	Intelligent Tutor

▲ Explore Related…

Petr Sedy | SELECT PATH | Current Path Name ▲

Select ▼

Articulate

MANAGE PATHS

▼ **EXIT PATHFINDER**

FIGURE 11E

PathFinder

○○○●●Engineering | Explore | Job Market | Curriculum Designer

Virginia Polytechnic Institute
Aerospace Engineering

Curricular Standards

	Status
Participation in math & science clubs and fairs in HS	√
Familiarity with and possession of a personal computer	√
SAT scores	√
High school GPA	√

Curricular Prerequisites

H.S. Chemistry	√
Pre-Calculus	√
H.S. Biology	√
Algebra II/Trig.	√
H.S. English	√

Semester 1 Fall 2002

▲ *Sem 1 - Fall 2002 - $10,557*

	Grade			Credits
			Done	
General Chemistry I	A	▲ ▼		3
General Chemistry Laboratory I	B	▲ ▼		4
Introduction To Engineering I	B	▲ ▼		4
Freshman English I	C	▲ ▼		2
Calculus I	B	▲ ▼		3
Algebra II / Trig.	A	▲ ▼		3

Sem 2 - Spring 2003 - $10,557 [+] [-]

Introduction To Engineering II		3
Freshman English II		4

(▶More)

↪ Explore Related...

Select ▼

GPA: 3.68 Cost: $46,536 Credits: 19/120

▲ **EXIT PATHFINDER** | *Petr Sedy* | **SELECT PATH** | Current Path Name ▲ | **MANAGE PATHS**

FIGURE 11F

PathFinder

○○○●●Engineering | Explore | Job Market | Curriculum Designer

Virginia Polytechnic Institute
Aerospace Engineering

	Grade	Credits
Algebra II/Trig.	√	
H.S. English	√	
Sem 1 - Fall 2002 - $10,557		18
General Chemistry I	A	3
General Chemistry Laboratory I	B	3
Introduction To Engineering I	B	3
Freshman English I	C	3
Calculus I	B	3
Algebra II / Trig.	A	3
Sem 2 - Spring 2003 - $10,557 [+] [-] Input Grades		18
Elementary Linear Algebra		3
Introduction to Engineering II		3
Freshman English II		3
▶ Calculus II		3
Vector Geometry		3
Foundations of Physics I		3
Sem 3 - Fall 2003 - $10,557 [+] [-]		18
General Chemistry II		3
Computational Methods		3
Intro to Aerospace Engineering		3
Statics		

▶More

GPA: 3.68 Cost: $46,536 Credits: 19/120

Calculus II

Course Objectives:
Recognize and manipulate functions given in numerical, graphical and analytical forms. Give reasonable approximations for values of functions, their limits, derivatives and integrals and express the error involved. Use graphing calculator technology to explore the behavior of functions, limits, derivatives, integrals and series, to find numerical approximations for limits, derivatives, integrals and intervals of convergence for power series; and to aid in solving problems and verifying solutions. Express Calculus concepts, and explain and interpret results in well-written sentences. Interpret the derivative as the limit of a difference quotient that gives the slope of a linear approximation to a graph at a point, and as instantaneous rate of change. Explain the relationship between the derivative and the definite integral as it is expressed in both parts of the Fundamental Theorem of Calculus. Use derivatives and integrals to model and solve applied problems. Use the sign, magnitude, and units of measurement of a solution to an applied problem to asses its reasonableness.

Course Expected Outcomes:
Students will learn about transcendental functions. Students will learn functions of transcendental functions. Students will learn functions and applications of series and sequences. Students will be introduced to the calculus and applications of parameterized curves. Students will learn techniques and applications of integration.

Course Co- and Pre-Requisites:
Calculus I   Met

▶ Course Syllabus

▶ Course Coverage Schedule

▶ Course Resources

▶ History of Student Performance

▶ Archive of Student Reviews

▶ Other Pertinent Information

[Placement Testing] [Intelligent Tutor]

◀ Explore Related...   [Select ▼]   **Articulate**

Petr Sedy   SELECT PATH [Current Path Name ▲]   **MANAGE PATHS**

▲ EXIT PATHFINDER

FIGURE 11G

PathFinder

○○○○**●●**Engineering | Explore | Job Market | Curriculum Designer

Virginia Polytechnic Institute
Aerospace Engineering

	Grade	Credits
Algebra II/Trig.	✓	
H.S. English	✓	
Sem 1 - Fall 2002 - $10,557		**18**
General Chemistry I	A	3
General Chemistry Laboratory I	B	3
Introduction To Engineering I	B	3
Freshman English I	C	3
Calculus I	B	3
Algebra II / Trig.	A	3
Sem 2 - Spring 2003 - $10,557		**18**
Elementary Linear Algebra	C	3
Introduction to Engineering II	B	3
Freshman English II	B	3
▲ Calculus II	F	3
Vector Geometry	A	3
Foundations of Physics I	A	3
Sem 3 - Fall 2003 - $10,557 [+][-]		**18**
Calculus II		3
General Chemistry II		4
Computational Methods		4
Intro to Aerospace Engineering		2

◄More►

GPA: 3.68   **Cost:** $46,536   **Credits:** 19/120

Calculus II

X Options for Reporting Failed Course (Student Must Choose One)

SELECT **Option 1:** Repeat same course in the immediate following semester
SELECT **Option 2:** Repeat course at a later semester
SELECT **Option 3:** Substitute Course for an equivalent course to be taken now or later

Course Objectives:
Recognize and manipulate functions given in numerical, graphical, and analytical forms. Give reasonable approximations for values of functions, their limits, derivatives and integrals and express the error involved. Use graphing calculator technology to explore the behavior of functions, limits, derivatives, integrals, and series; to find numerical approximations for limits, derivatives, integrals and intervals of convergence for power series, and to aid in solving problems and verifying solutions. Express Calculus concepts, and explain and interpret results in well-written sentences. Interpret the derivative as the limit of a difference quotient that gives the slope of a linear approximation to a graph at a point, and as instantaneous rate of change. Explain the relationship between the derivative and the definite integral as it is expressed in both parts of the Fundamental Theorem of Calculus. Use derivatives and integrals to model and solve applied problems. Use the sign, magnitude, and units of measurement of a solution to an applied problem to assess its reasonableness.

Course Expected Outcomes:
Students will learn about transcendental functions. Students will learn functions of transcendental functions. Students will learn functions and applications of series and sequences. Students will be introduced to the calculus and applications of parameterized curves. Students will learn techniques and applications of integration.

Course Co- and Pre-Requisites:
Calculus I   Met

▲ Course Syllabus
▲ Course Coverage Schedule
▲ Course Recourses
▲ History of Student Performance

Placement Testing | Intelligent Tutor

▲ Explore Related... Select ▼

Petr Sedy   SELECT PATH   Current Path Name ▲

▼ EXIT PATHFINDER | MANAGE PATHS | Articulate

FIGURE 11H

PathFinder

○○○●●Engineering | Explore | Job Market | Curriculum Designer

Virginia Polytechnic Institute

Aerospace Engineering

	Grade	Credits
Sem 1 - Fall 2002 - $10,557		18
General Chemistry I	A	3
General Chemistry Laboratory I	B	4
Introduction To Engineering I	B	4
Freshman English I	C	2
Calculus I	B	3
Algebra II / Trig.	A	3
Sem 2 - Spring 2003 - $10,557		18
Elementary Linear Algebra	C	3
Introduction to Engineering II	B	4
Freshman English II	B	4
Calculus II	F	2
Vector Geometry	A	3
Foundations of Physics I	A	2
Sem 3 - Fall 2003 - $10,557 [+] [-]		18
Calculus II		3
General Chemistry II		4
Computational Methods		4
▲ Intro to Aerospace Engineering		2
Statics		3
Multivariable Calculus		2

GPA: 3.68   Cost: $46,536   Credits: 19/120

Intro to Aerospace Engineering

Course Description:
An overview of aerospace engineering from a design perspective; introductory aerodynamics, lift, drag and the standard atmosphere; aircraft performance, stability, and control; propulsion; structures; rocket and spacecraft trajectories and orbits.

Course Objectives:
To highlight the fundamental concepts and approaches of aerospace engineering and design through lectures on aeronautics. astronautics, and design. To immerse student teams in a hands-on, lighter-than-air (LTA) vehicle design project where they design, build, and fly radio-controlled LTA vehicles. To show the connections between theory and practice in the LTA vehicle project.

Course Expected Outcomes:
Solid understanding of the fundamental concepts and approaches of aerospace engineering and design. To design, build, and fly radio-controlled LTA vehicles. To estimate and illustrate the performance, weight, and principal characteristics of the LTA vehicles using physics, mathematics, and chemistry known to freshmen (the emphasis being on the application of this knowledge to aerospace engineering and design rather than on exposure to new science and mathematics).

Course Co- and Pre-Requisites:

Prerequisites -- AOE 4134	Met
AOE 4065/6	Met
Corequisites -- MATH 2224	Met

▲ Course Syllabus
▲ Course Coverage Schedule
▲ Course Resources
▲ History of Student Performance
▲ Archive of Student Reviews
▲ Other Pertinent Information

[Placement Testing] [Intelligent Tutor]

↩ Explore Related...

Internships
Companies
Job Functions
[▼]

[Articulate]

| ▼ EXIT PATHFINDER | *Petr Sedy* | SELECT PATH | Current Path Name | ▲ | MANAGE PATHS |

(► More)

FIGURE 11 I

PATHFINDER

ooo●●ENGINEERING   EXPLORE   JOB MARKET   CURRICULUM DESIGNER

YOU'RE NOW EXPLORING:
2003 RI-SGC
Summer Internships

▲ INSTITUTIONS, FUNDING & EMPLOYERS

▲ PURSUITS

▲ PROGRAMS & STANDARDS

▼ CURRICULA AND COURSES
CURRICULA
COURSE TYPES
COURSES
COURSE TUTORING

SUMMER INTERNSHIP -- UNITED TECHNOLOGIES

▶ ADD TO BASKET

Title of Internship: Energy Cost Model of the Otis Gen2 Gearless Elevator System.

Objective:
To develop an energy cost model of the Otis Gen2 Gearless Elevator system that addresses design parameters incorporated in equivalent industry geared systems.
To identify critical "areas of innovation" and qualify how innovation in those areas affected the energy cost model.

Qualifications:
Open to matriculating college students of all levels.
Students majoring in Engineering and Economics are encouraged to apply.

Other information:
This is a minimum 8 week summer commitment between the last week of May and the first week of September.

Research facilities located in East Hartford, Connecticut. Please see link below for more information about East Hartford, Connecticut and surrounding cities.

Living arrangements and travelling expenses will be fully covered Sunday.

Petr Sedy   SELECT PATH   CURRENT PATH NAME   ▲

▼ EXIT PATHFINDER

BACK TO CURRICULUM   ▲
PAGE 1 OF 2
MANAGE PATHS

FIGURE 11J

PATHFINDER

○○○○●●ENGINEERING | EXPLORE | JOB MARKET | CURRICULUM DESIGNER

YOU'RE NOW EXPLORING

VA Tech's AOE 2104:

Intor to Aero. Eng.

▲ INSTITUTIONS, FUNDING & EMPLOYERS

▲ PURSUITS

▲ PROGRAMS & STANDARDS

▼ CURRICULA AND COURSES
  CURRICULA
  COURSE TYPES
  COURSES
  COURSE TUTORING

Available Tutoring Resources for VA Tech's AOE 2104: Intro to Aero. Engineering Spring 2003

▶ ADD TO BASKET

Aerospace and Ocean engineering tutoring program
The Innovations for Aerospace and Ocean engineering tutoring program project, twice funded by the Center for Innovations in Learning, has built an interesting array of modules and tools designed to be used in a variety of aerospace and ocean engineering discipline settings to promote design skills right from the freshman class.

Contact: Leslie Graham grahamlp@vt.edu

Register: www.aoe.vt.edu

Institutional resources
Student Success center
*Times and location of groups are provided at the time of the tutoring request and are not listed here.
Daily walk-in tutoring schedule available below:

Monday: 12:00pm-4:00pm 4:00pm-5:00pm
Tutor requests taken College Writing Center tutor available

Tuesday: 10:00am-2:00pm 4:00pm-5:00pm 5:00pm-8:00pm
Tutor requests taken College Writing Center tutor available
Information tech. (computer) assistance

Wednesday: 10:00am-1:00pm 4:00-5:00pm
Tutor requests taken College Writing Center tutor available

Thursday: Noon-4:30pm 1:00pm-4:00pm 4:00pm-5:00pm 5:00pm-7:00pm
Tutor requests taken Information tech. (computer) assistance
College Writing Center tutor available Information tech. (computer) assistance

Friday: 2:00pm-4:00pm
College Writing Center tutor available

BACK TO CURRICULUM

PAGE 1 OF 2 ▶

Petr Sedy | SELECT PATH | MANAGE PATHS

▼ EXIT PATHFINDER | CURRENT PATH NAME ▲

FIGURE 11K

PathFinder

○○○○●Engineering   Explore   Job Market   Curriculum Designer

Virginia Polytechnic Institute
Aerospace Engineering

	Grade	Credits
Sem 1 - Fall 2002 - $10,557		18
General Chemistry I	A	3
General Chemistry Laboratory I	B	4
Introduction To Engineering I	B	4
Freshman English I	C	2
Calculus I	B	3
Algebra II / Trig.	A	3
Sem 2 - Spring 2003 - $10,557		18
Elementary Linear Algebra	C	3
Introduction to Engineering II	B	4
Freshman English II	B	4
Calculus II	F	2
Vector Geometry	A	3
Foundations of Physics I	A	2
Sem 3 – Fall 2003 - $10,557 [+] [-]		18

Calculus II	3
General Chemistry II	4
▲ Computational Methods	4
▲ Intro to Aerospace Engineering	2
Statics	3
Multivariable Calculus	2

(►More)

GPA: 3.68 Cost: $46,536 Credits: 19/120

Articulate Course

	Input Course		Output Course
State	Virginia ▼	State	Outline ▼
Institution	Virginia Tech ▼	Institution	University of Phoenix ▼
Discipline	Aerospace Engineering ▼	Discipline	Engineering ▼
Program	Aerospace Engineering ▼	Program	▼
Course Number	AOE 2074	Course Number	
Course Name	Computational Methods	Course Name	Computational Methods
Course Description	Lorum ipsum dolor sit amet, con, mininum venami quis nostrud laboris nisi ut aliquip ex ea com color in reprehenderit in valuplate nonumy. Lorum ipsum dolor.	Course Description	Lorum ipsum dolor sit amet, con, mininum venami quis nostrud laboris nisi ut aliquip ex ea com color in reprehenderit in valuplate nonumy. Lorum ipsum dolor.
Course Type	Engineering Science	Course Type	Engineering Science
Course Credits	3	Course Credits	3
Other Info		Other Info	

Add to Binder

▼ 6 of 10 ▲

Apply to My Curriculum   Quit Articulation

▼ EXIT PATHFINDER   *Petr Sedy*   SELECT PATH   Current Path Name ▲   MANAGE PATHS

FIGURE 11L

PathFinder

ooo••Engineering | Explore | Job Market | Curriculum Designer

Virginia Polytechnic Institute
Aerospace Engineering

	Grade	Credits
Sem 1 – Fall 2002 - $10,557		18
General Chemistry I	A	3
General Chemistry Laboratory I	B	4
Introduction To Engineering I	B	4
Freshman English I	C	2
Calculus I	B	3
Algebra II / Trig.	A	3
Sem 2 – Spring 2003 - $10,557		18
Elementary Linear Algebra	C	3
Introduction to Engineering II	B	4
Freshman English II	B	4
Calculus II	F	2
Vector Geometry	A	3
Foundations of Physics I	A	2
Sem 3 – Full 2003 - $10,557 [+] [-]		
Calculus II		3
General Chemistry II		4
Computational Methods		4
Intro to Aerospace Engineering		2
▲Statics		3
Multivariable Calculus		2

GPA: 3.68 Cost: $46,536 Credits: 19/120 (▶More)

Statics

Course Co- and Pre-Requisites:
Prerequisites – EF 1016 | Met
MATH 1114 | UNMET | Approved to Waive Prerequisite? [Yes] [No]
Corequisites – MATH 2224 | Met

Course Description:
An overview of aerospace engineering from a design perspective; introductory aerodynamics, lift, drag, and the standard atmosphere, aircraft performance, stability, and control; propulsion, structures; rocket and spacecraft trajectories and orbits.

Course Objectives:
Introduce concepts of static mechanics as it relates to introductory aerospace engineering; Teach how to evaluate the moments of a force and the resultant of a force system; Analyze general equilibrium problems and teach freebody diagrams and the fundamental applications of equilibrium equations; Address the structural applications of concepts listed above.

Course Expected Outcomes:
Define the concepts listed above. Resolve and add vectors. Multiply vectors using both dot and cross products. Find the resultant of any force system. Isolate any body and draw the freebody diagram. Solve for unknown forces and moments on a body in equilibrium. Determine internal forces in trusses, frames, and machines. Compute the centroid or the center of mass using integration and composite parts. Construct shear and bending moment diagrams for beams. Work static problem involving friction. Calculate area moments of inertia by integration. Calculate area moments of inertia using the parallel-axis theorem.

▲ Course Syllabus
▲ Course Coverage Schedule
▲ Course Resources
▲ History of Student Performance
▲ Archive of Student Reviews
▲ Other Pertinent Information

[Placement Testing] [Intelligent Tutor]

◀ Explore Related... [Select ▼]

Petr Sedy | SELECT PATH | Current Path Name ▲ | [Select ▼] [Articulate]

▲ EXIT PATHFINDER | MANAGE PATHS

FIGURE 11M

PathFinder

○○○●●Engineering | Explore | Job Market | Curriculum Designer

Virginia Polytechnic Institute
Aerospace Engineering

Intro to Aerospace Engineering

Course Description:
An overview of aerospace engineering from a design perspective; introductory aerodynamics, lift, drag, and the standard atmosphere, aircraft performance, stability, and control; propulsion; structures; rocket and spacecraft trajectories and orbits.

Course Objectives:
To highlight the fundamental concepts and approaches of aerospace engineering and design through lectures on aeronautics, astronautics, and design. To immerse student teams in a hands-on, lighter-than-air (LTA) vehicle design where they design, build, and fly radio-controlled LTA vehicles. To show the connections between theory and practice in the LTA vehicle project.

Course Expected Outcomes:

...erospace engineering and design. To design, build, and fly
...weight, and principal characteristics of the LTA vehicles using
...being on the application of this knowledge to aerospace
...athematics).

	Grade	Credits
Sem 1 – Fall 2002 - $10,557		18
General Chemistry I	A	3
General Chemistry Laboratory I	B	4
Introduction To Engineering I	B	4
Freshman English I	C	2
Calculus I	B	3
Algebra II / Trig.	A	3
Sem 2 – Spring 2003 - $10,557		18
Elementary Linear Algebra	C	
Introduction to Engineering II	B	
Freshman English II	B	
Calculus II	F	
Vector Geometry	A	
Foundations of Physics I	A	
Sem 3 – Fall 2003 - $10,557 ⊞ ⊟		
Calculus II		
General Chemistry II		4
Computational Methods		4
▲ Intro to Aerospace Engineering		2
Statics		3
Multivariable Calculus		2

WARNING!!

This course is required for your curriculum. Dropping this course without a replacement will invalidate your curriculum.

SELECT	Cancel
SELECT	Articulate an equivalent course
SELECT	Drop this course anyway

▶ Course Resources

▶ History of Student Performance

▶ Archive of Student Reviews

▶ Other Pertinent Information

Placement Testing	Intelligent Tutor

◀ Explore Related... | Select |

GPA: 3.68   Cost: $46,536   Credits: 19/120 ◯▶More

▼ EXIT PATHFINDER	Petr Sedy	SELECT PATH	Current Path Name ▲	▲	Articulate
					MANAGE PATHS

FIGURE 11N

PathFinder

○○○●●Engineering | Explore | Job Market | Curriculum Designer

Virginia Polytechnic Institute
Aerospace Engineering

	Grade	Credits
Sem 1 – Fall 2002 - $10,557		18
General Chemistry I	A	3
General Chemistry Laboratory I	B	3
Introduction To Engineering I	B	3
Freshman English I	C	3
Calculus I	B	3
Algebra II / Trig.	A	3
Sem 2 – Spring 2003 - $10,557		15
Elementary Linear Algebra	C	3
Introduction to Engineering II	B	3
Freshman English II	B	3
Calculus II	F	3
Vector Geometry	A	3
Foundations of Physics I	A	3
Sem 3 – Fall 2003 - $10,557 [+] [-]		15
Calculus II	A	3
General Chemistry II	B	3
Computational Methods	A	3
Multivariable Calculus	B	3
Foundations of Physics II	B	3
Sem 4 – Spring 2003 - $8,797 [+] [-]		

GPA: 3.68   Cost: $46,536   Credits: 19/120   (▶More)

Curriculum Statistics

▼ Academic Performance Details

	In-State				
Total credits attempted to date:	48		Credit balance to be earned to graduate:	48
Total credits proposed for current semester:	16		Total credits transferred to date:	16
Total credits earned towards graduation:	32		Total credits att. towards graduation:	32
Total credits earned to date:	32		Current Cumulative GPA:	32
Credits towards grad. for current semester:	16			

▼ Financial Records Details

	In-State	Out of State	International
Current Semester Tuition+Fees	Numbers here		
Cum. Tuition+Fees to Date			

▼ The GPA Modeler

			Target GPA
Intro to Aerospace Engineering	B ⬆⬇		
Statistics	B ⬆⬇		⬆ 3.5 ⬇
SPECIAL STUDY	B ⬆⬇		
Materials in Aero. and Oceanic Systems	B ⬆⬇		
Dynamics	B ⬆⬇		
Intro Diff Equations	B ⬆⬇		

▲ Explore Related...   Select ▼

Informal Transcript

Articulate

Petr Sedy | SELECT PATH | Current Path Name ▲ | MANAGE PATHS

▲ EXIT PATHFINDER

FIGURE 110

PathFinder

ooo••Engineering | Explore | Job Market | Curriculum Designer

Virginia Polytechnic Institute
Aerospace Engineering

	Grade	Credits
Sem 1 – Fall 2002 - $10,557		18
General Chemistry I	A	3
General Chemistry Laboratory I	B	3
Introduction To Engineering I	B	3
Freshman English I	C	3
Calculus I	B	3
Algebra II / Trig.	A	3
Sem 2 – Spring 2003 - $10,557		15
Elementary Linear Algebra	C	3
Introduction to Engineering II	B	3
Freshman English II	B	3
Calculus II	F	3
Vector Geometry	A	3
Foundations of Physics I	A	3
Sem 3 – Fall 2003 - $10,557 [+][-]		15
Calculus II	A	3
General Chemistry II	B	3
Computational Methods	A	3
Multivariable Calculus	B	3
Foundations of Physics II	B	3
Sem 4 – Spring 2003 - $8,797 [+][-]		

GPA: 3.68   Cost: $46,536   Credits: 19/120   (►More)

Informal Transcript

Sem 1 – Fall 2002 - $10,557		
General Chemistry I	A	3
General Chemistry Laboratory I	B	4
Introduction to Engineering I	B	4
Freshman English I	C	2
Calculus I	B	3
Algebra II / Trig	A	3

Sem 3 – Fall 2003 - $10,557		
Calculus II	A	3
General Chemistry II	B	3
Computational Methods	A	3
Multivariable Calculus	B	3
Foundations of Physics II	B	3

Sem 2 – Spring 2003 - $10,557		
Elementary Linear Algebra	C	3
Introduction to Engineering II	B	4
Freshman English II	B	4
Calculus II	F	2
Vector Geometry	A	3
Foundations of Physics I	A	2

▼ Academic Performance Details

Total credits attempted to date:	51
Total credits proposed for current semester:	15
Total credits earned towards graduation:	51
Total credits earned to date:	51
Credits towards grad. for current semester:	15
Credit balance to be earned to graduate:	69
Total credits transferred to date:	0
Total credits att. towards graduation:	51
Current Cumulative GPA:	3.26

Print

◄ Explore Related...   Select ▼

Petr Sedy | SELECT PATH | Current Path Name ▲ ▼ | Articulate | **MANAGE PATHS**

◄ EXIT PATHFINDER

FIGURE 11P

PATHFINDER

○○○●●● ENGINEERING

EXPLORE | **JOB MARKET** | **CURRICULUM DESIGNER**

YOU'RE NOW EXPLORING:

ACADEMIC PERFORMANCE-BASED MERIT GRADES

▲ **INSTITUTIONS, FUNDING & EMPLOYERS**

▲ **PURSUITS**

▲ **PROGRAMS & STANDARDS**

▼ **CURRICULA AND COURSES**
 CURRICULA
 COURSE TYPES
 COURSES
 COURSE TUTORING

FINANCIAL RESOURCES: ACADEMIC PERFORMANCE-BASED MERIT GRANTS

▶ **ADD TO BASKET**

IN-INSTITUTION

UPPERCLASS SCHOLARSHIPS

Our College of Engineering has corporate and private support for upperclass academic scholarships. These competitive upperclass scholarships are awarded on the basis of performance at Virginia Tech. Each January, scholarship information is announced on the engineering opportunities listserv which is used to communicate with enrolled Virginia Tech engineering students. Rising sophomores with a cumulative 3.4 GPA or above and rising juniors and seniors with a cumulative 3.0 GPA at the end of fall semester are eligible to apply. The scholarship application form is available online in late January. Application deadline is March 1. Approximately 450 upper class engineering students receive academic scholarships each year. Scholarships range from $500 to full tuition/fees and room/board. The average award is $1,000. Students may receive both financial aid awards based on income and academic awards based on achievements.

Eleanor Davenport Leadership Scholarship

Davenport Leadership Scholars are selected on the basis of superior intellectual promise and academic performance, leadership ability, personal character, and community

service. Eligible applicants must have an exemplary GPA, SAT scores of 1500 or higher, and meet leadership and service requirements.

Scholars should have submitted their application for admission to the College of Engineering at Virginia Tech by January 15, 2003 and plan to pursue full-time study (12 credits or more) toward a degree in engineering. Recipients will receive an award the equivalent of in-state tuition and fees for a total of four years. This scholarship may be renewed each semester for a total of eight semesters of academic study, or until receipt of the B.S. degree in engineering, whichever occurs first. Scholars are expected to maintain full-time student status enrolled in an engineering curriculum and an overall GPA of 3.5 or better in order to retain the award. Four scholarships will be granted each year to applicants who demonstrate the necessary requirements.

Contact Carlene Arthur at carthur@vt.edu if you qualify to request an application. Applicants for this scholarship will be accepted through February 15, 2003. Personal interviews with candidates may be conducted as part of the selected criteria. Recipients of the award will be notified no later than March 15, 2003.

▼ **EXIT PATHFINDER** | Petr Sedy | **SELECT PATH** | CURRENT PATH NAME ▲ | **BACK TO CURRICULUM** ▲ | PAGE 1 OF 2 | **MANAGE PATHS**

FIGURE 11Q

PathFinder

○○○●●Engineering | Explore | Job Market | Curriculum Designer

Virginia Polytechnic Institute
Aerospace Engineering

	Grade	Credits
Sem 2 – Spring 2003 - $10,557		15
Elementary Linear Algebra	C	3
Introduction to Engineering II	B	3
Freshman English II	B	3
Calculus II	F	3
Vector Geometry	A	3
Foundations of Physics I	A	3
Sem 3 – Fall 2003 - $10,557		15
Calculus II	A	3
General Chemistry II	B	3
Computational Methods	A	3
Multivariable Calculus	B	3
Foundations of Physics II	B	3
Sem 4 – Spring 2003 - $8,797 [+] [–] Input Grades		18

Intro to Aerospace Engineering	3
Statics	3
Special Study	3
Materials in Aero. And Oceanic Sys.	3
Dynamics	3
Intro Diff Equations	3

GPA: 3.68   Cost: $46,536   Credits: 19/120   ►More

Materials in Aero. and Oceanic Sys.

Course Objectives:
To introduce the Aerospace and/or ocean engineering student to the fundamental properties of materials typically required for structural design. Presentation and contrasting the performance capabilities of metals, polymers, composites and ceramics. Provide an understanding of how processing affects material properties and performance. Providing foundation of material manufacturing.

Course Expected Outcomes:
Identify the meaning and significance of material properties which are used to describe mechanical performance. Perform fundamental calculations and analyses necessary to describe and predict mechanical behavior of materials. Identify and recommend processing methods by which specific material structures can be produced and their properties developed or enhanced. Identify and select appropriate materials for aerospace applications based upon the knowledge of performance needs and design constraints, material properties, processing opportunities and limitations.

Course Co- and Pre-Requisites
Prerequisites – AOE 2074

▲ Course Syllabus
▲ Course Coverage Schedule
▲ Academic Performance Details
▲ History of Student Performance
▲ Archive of Student Reviews
▲ Other Pertinent Information

[Placement Testing]   [Intelligent Tutor]

↰ Explore Related...   [Select ▼]

Petr Sedy   SELECT PATH   [Current Path Name ▲]   [Articulate]

▼ EXIT PATHFINDER   MANAGE PATHS

FIGURE 11R

PathFinder

○○○●●Engineering | Explore | Job Market | Curriculum Designer

Virginia Polytechnic Institute
Aerospace Engineering

	Grade	Credits
Sem 2 – Spring 2003 - $10,557		**15**
Elementary Linear Algebra	C	3
Introduction to Engineering II	B	3
Freshman English II	B	3
Calculus II	F	3
Vector Geometry	A	3
Foundations of Physics I	A	3
Sem 3 – Fall 2003 - $10,557		**15**
Calculus II	A	3
General Chemistry II	B	3
Computational Methods	A	3
Multivariable Calculus	B	3
Foundations of Physics II	B	3
Sem 4 – Spring 2003 - $8,797		**18**
Intro to Aerospace Engineering	A	3
Statics	B	3
Special Study	B	3
▲ Materials in Aero. And Oceanic Sys.	D	3
Dynamics	C	3
Intro Diff Equations	B	3

GPA: 3.68 Cost: $46,536 Credits: 19/120 ⟨ ▶More ⟩

Materials in Aero. and Oceanic Sys.

X Options for Reporting Failed Course (Student Must Choose One)

SELECT	**Option 1:** Repeat same course in the immediate following semester
SELECT	**Option 2:** Repeat course at a later semester
SELECT	**Option 3:** Substitute Course for an equivalent course to be taken now or later

Course Objectives:
To introduce the Aerospace and/or ocean engineering student to the fundamental properties of materials typically required for structural design. Presentation and contrasting the performance capabilities of metals, polymers, composites and ceramics. Provide an understanding of how processing affects material properties and performance. Providing foundation of material manufacturing.

Course Expected Outcomes:
Identify the meaning and significance of material properties which are used to describe mechanical performance. Perform fundamental calculations and analyses necessary to describe and predict mechanical behavior of materials. Identify and recommend processing methods by which specific material structures can be produced and their properties developed or enhanced. Identify and select appropriate materials for aerospace applications based upon the knowledge of performance needs and design constraints, material properties, processing opportunities and limitations.

Course Co- and Pre-Requisites
Prerequisites – AOE 2074

▲ **Course Syllabus**
▲ **Course Coverage Schedule**
▲ **Academic Performance Details**
▲ **History of Student Performance**
▲ **Archive of Student Reviews**
▲ **Other Pertinent Information**

| Placement Testing | Intelligent Tutor |

⬆ **Explore Related...** | Select ▼ | Petr Sedy | SELECT PATH | Current Path Name ▲ ▼ | **MANAGE PATHS**

| Articulate |

◀ **EXIT PATHFINDER**

FIGURE 11S

PATHFINDER

○○○○◉◉ENGINEERING

EXPLORE   JOB MARKET   CURRICULUM DESIGNER

YOU'RE NOW EXPLORING:

VA Tech AOE 2994

▲ INSTITUTIONS, FUNDING
  & EMPLOYERS

▲ PURSUITS

▲ PROGRAMS &
  STANDARDS

▼ CURRICULA AND
  COURSES
  CURRICULA
  COURSE TYPES
  COURSES
  COURSE TUTORING

OSDC Intelligent Tutor For VA Tech's AOE 2994:
Underground Research Sprint 2003

▶ ADD TO BASKET

Launch Intelligent Tutor

BACK TO CURRICULUM   ▲

PAGE 1 OF 1

▲ EXIT PATHFINDER   Petr Sedy   SELECT PATH   CURRENT PATH NAME   ▲   ANAGE PATHS

FIGURE 12A

Pathevo

ooo•••Engineering

Explore | Job Market | Curriculum Designer

FILTERS | HISTORY | BINDER | SEARCH

DECISION MAKER

ADD TO BINDER

Please select media to view

Video: Welcome Video

◀

Welcome to Pathevo

Welcome to career planning with PathEvo! You're doing yourself a favor that should benefit you for many years. Many people never take this important time to explore their own strengths and interests in combination with the academic and career information that is out there.

Imagine, if you will, that you are suddenly 8 or 10 years in the future. You headed down a convenient school and career path and here you are. It is getting harder and harder to go to work. You do not have much in common with the people you work with. You do not feel like trying harder and frankly, you are not all that great at your job. But it would be so expensive to start again...to go back to school, give up years of retirement benefits. You feel stuck.

This is what thousands of people talk about with career counselors and psychologists, like me, every day.

We help people people think about themselves -- what their true interests are, what subjects they like and do not like, what they think they are best at, whether they like working alone or in a team, what their concerns are about making career decisions at their stage of life, including how much time, money, and determination they have. Sometimes they say they have never talked about this before.

You do not have to get stuck, down the road. PathEvo can help guide you through this maze. We have collected some of the best ideas from career psychologists and counselors, for you to use while you look through all the information.

Take a few minutes to complete the Self-Guided Interview. Your answers will help personalize your search for information in PathEvo. Print out your answers...share them with relatives, friends, advisors, or whoever helps you with career planning. Then use the career interest survey to help you think about what fields you would like the most.

We would like you to be on a good path from the start. And remember one really important thing. There is no ONE right career for anyone. We are all too complicated for that. And that is a good thing, because there are lots of interesting things to do, and it is nice to get paid to do them!

Welcome to PathEvo. Believe me, it could save you a lot of time about 10 years from now!

▲

Institutions, Funding and Employers

Pursuits

Programs and Standards

Curricula and Courses

▼ EXIT PATHFINDER | ■ Show Hidden Items | Version: 32d | Petr Sedy | SELECT PATH | Current Path Name ▲ | MANAGE PATHS
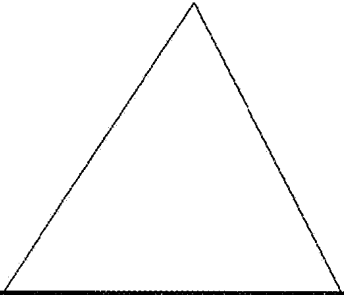
FIGURE 12B

Pathevo   *Explore*   *Job Market*   *Curriculum Designer*

○○○●●Engineering

FILTERS   *HISTORY*   *BINDER*   *SEARCH*

ADD TO BINDER   DECISION MAKER

No Data

- ▲ Institutions, Funding and Employers
  Agencies and Companies
  Industries
  Engineering Disciplines
  Colleges
  Financial Resources
  Geographical Locations
- ▲ Pursuits
- ▲ Programs and Standards
- ▲ Curricula and Courses

▲ *EXIT PATHFINDER*   ▣ *Show Hidden Items*   *Version: 32d*   *Petr Sedy*   *SELECT PATH*   *Current Path Name* ▲   *MANAGE PATHS*

FIGURE 12C

Pathevo

○○○●●Engineering

Explore | Job Market | Curriculum Designer

FILTERS | HISTORY | BINDER | SEARCH

ADD TO BINDER | DECISION MAKER

No Data

Company Type

Government and Private Agencies ▲

Public and Private companies ▲

All ▲

AGENCIES AND COMPANIES

▼ **EXIT PATHFINDER** | ▪ *Show Hidden Items* | *Version: 32d* | *Petr Sedy* | **SELECT PATH** | Current Path Name ▲ | **MANAGE PATHS**

FIGURE 12D

Pathevo

○○○○●●Engineering

Explore   Job Market   Curriculum Designer

FILTERS   HISTORY   BINDER   SEARCH

DECISION MAKER

ADD TO BINDER

No Data

Company Size

5-50
51-500
501-5,000
5,001-50,000
50,001-500,000
500/001-5m
All size options

Government and Private
Agencies

EXIT PATHFINDER   ■ Show Hidden Items   Version: 32d   Petr Sedy   SELECT PATH   MANAGE PATHS

Current Path Name

FIGURE 12E

Pathevo

ooo••Engineering

Explore | Job Market | Curriculum Designer

FILTERS | HISTORY | BINDER | SEARCH

DECISION MAKER

ADD TO BINDER

No Data

Agencies and
Companies
Location

US States
US Regions
US Sub-regions
All US States

51-500

EXIT PATHFINDER | ■ Show Hidden Items | Version: 32d | Petr Sedy | SELECT PATH | Current Path Name ▲ | MANAGE PATHS
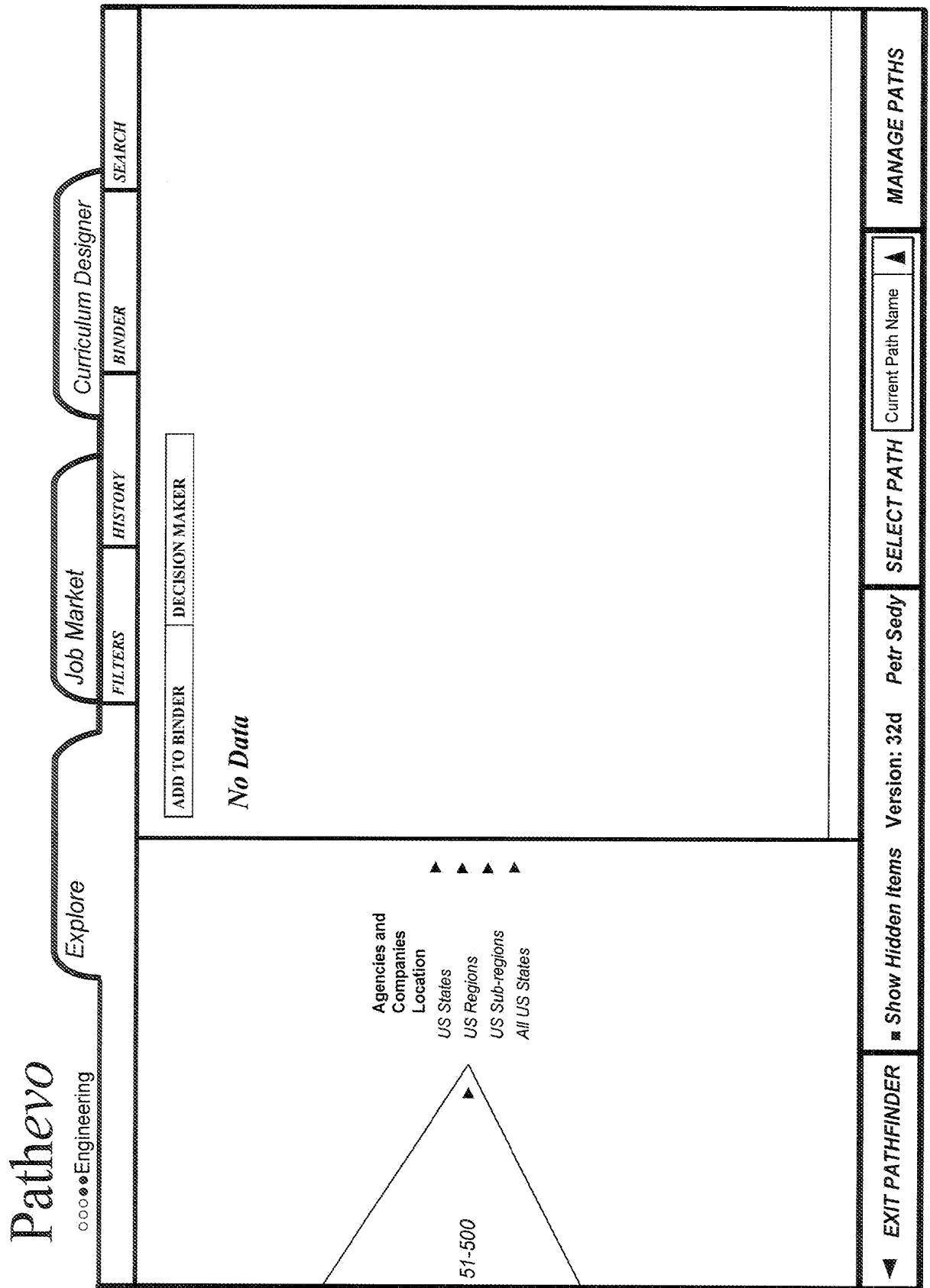
FIGURE 12F

Pathevo

ooooo**Engineering**

Explore | **Job Market** | **Curriculum Designer**

FILTERS | HISTORY | BINDER | SEARCH

ADD TO BINDER | DECISION MAKER

No Data

Agencies and
Companies, Location,
US States by Region

☐ Midwest
☐ North East
☐ South
☐ West

US Regions

▼ EXIT PATHFINDER | ■ Show Hidden Items | Version: 32d | Petr Sedy | SELECT PATH Current Path Name ▲ | MANAGE PATHS

FIGURE 12G

Pathevo

ooo••Engineering

Explore | Job Market | Curriculum Designer

FILTERS | HISTORY | BINDER | SEARCH

DECISION MAKER

ADD TO BINDER

No Data

Agencies and Companies in North East Region (Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont)

☐ Center for Advanced Computing Research, California Institute of Technology

☐ Communication and Data Storage Lab, University of Minnesota

☐ Computer and Information Technology Institute (CITI), Rice University

☐ Data Storage Systems Center, Carnegie Mellon University

☐ Department of Defense, Naval Research Laboratory (NRL), The Center for Computational Science (CCS)

☐ NASA, Earth & Space Data Computing Division (ESDCD)

☐ Oak Ridge National Laboratory, Center for Computational Sciences

☐ U.S. Army Engineer Research and Development Center, Information Technology Lab

☐ North East

▲ EXIT PATHFINDER | ■ Show Hidden Items | Version: 32d | Petr Sedy | SELECT PATH | Current Path Name | ▲ | MANAGE PATHS

FIGURE 12H

Pathevo

ooo◦●Engineering

Explore *Job Market* *Curriculum Designer*

FILTERS | HISTORY | BINDER | SEARCH

ADD TO BINDER ········· DECISION MAKER

No Data

▲ Institutions, Funding and Employers
Agencies and Companies
Industries
Engineering Disciplines
Colleges
Financial Resources
Geographical Locations
▲ Pursuits
▲ Programs and Standards
▲ Curricula and Courses

☐ Department of Defense, Naval Research Laboratory (NRL), The Center for Computational Science (CCS)

▲ EXIT PATHFINDER | ☒ Show Hidden Items Version: 32d   Petr Sedy   SELECT PATH   Current Path Name ▲ | MANAGE PATHS

FIGURE 121

PATHEVO

○○○●●ENGINEERING

EXPLORE	JOB MARKET		CURRICULUM DESIGNER
	FILTERS	HISTORY	BINDER	SEARCH

▲ INSTITUTIONS, FUNDING AND EMPLOYERS

AGENCIES AND COMPANIES

INDUSTRIES

ENGINEERING DISCIPLINES

COLLEGES

FINANCIAL RESOURCES

GEOGRAPHICAL LOCATIONS

▲ PURSUITS

▲ PROGRAMS AND STANDARDS

▲ CURRICULA AND COURSES

□ IBM

ADD TO BINDER   **DECISION MAKER**

IBM

About IBM

At IBM, we strive to lead in the invention, development and manufacture of the industry's most advanced information technologies, including computer systems, software, storage systems and microelectronics.

We translate these advanced technologies into value for our customers through our professional solutions, services and consulting businesses worldwide.

History of IBM

The character of a company - the stamp it puts on its products, services and the marketplace - is shaped and defined over time. It evolves. It deepens. It is expressed in an ever-changing corporate culture, in transformational strategies, and in new and compelling offerings for customers. IBM's character has been formed over nearly 100 years of doing business in the field of information handling. Nearly all of the company's products were designed and developed to record, process, communicate, store and retrieve information - from its first scales, tabulators and clocks to today's most powerful computers and vast global networks.

IBM helped pioneer information technology over the years, and it stands today at the forefront of a worldwide industry that is revolutionizing the way in which enterprises, organizations and people operate and thrive.

The pace of change in that industry, of course, is

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IMAGE IBM
IMAGE IBM NOTEBOOK 1
IMAGE IBM NOTEBOOK 2
IMAGE IBM NOTEBOOK 3
VIDEO IBM
VIDEO IBM DATA STORAGE

to the 21st or pinpoint – year-by-year or decade-by-decade - the key events that have led to the IBM of today. We hope that you enjoy this unique look back at the highly textured history of the International Business Machines Corporation.

About Community Relations
New strategic directions

Over the last ten years, IBM has been one of the largest corporate contributors of cash, equipment, and people to nonprofit organizations and educational institutions across the U.S. and around the world. In all our efforts, we help people use information technology to improve quality of life for themselves and others.

IBM's contributions target a few key areas and leverage our expertise in technology. In our efforts, we strive to underscore the role of technology as a tool to address societal issues; demonstrate IBM's reputation as a solutions provider; and focus IBM's philanthropic programs to enhance relationships with customers and employees. This policy of strategic investments has benefited communities by bringing IBM experts from all over the world to address their concerns, and has engaged our employees more fully in the important mission of corporate citizenship.

We believe the same information technology innovations

| ▼ EXIT PATHFINDER | ■ Show Hidden Items | version 32d | Petr Sedy | SELECT PATH | CURRENT PATH NAME | ▲ | MANAGE PATHS |

FIGURE 12J

Pathevo

○○○●●Engineering

Explore   Job Market   Curriculum Designer

BINDER   SEARCH

DECISION MAKER

ADD TO BINDER

No Data

Job Market

Geographical Region –
Career Pursuits

Geographical Region –
Education Pursuits

Job Titles/Job Functions/
Occupations

Engineering Disciplines

Education/Experience
Levels

Industry/Corporate
Sectors

Salary Brackets

Start Exploring

Current Path Name ▲

▼ EXIT PATHFINDER   Version: 32d   Petr Sedy   SELECT PATH

MANAGE PATHS

FIGURE 12K

Pathevo

○○○●●Engineering

Explore | Job Market | Curriculum Designer

BINDER | SEARCH

ADD TO BINDER   **DECISION MAKER**

No Data

Salary Brackets
- $0-$10K
- $11K-$20K
- $21K-$30K
- $31K-$40K
- $41K-$50K
- $51K-$60K
- $61K-$70K
- $71K-$80K
- $81K-$90K
- $91K-$100K
- $101K-$125K
- $126K-$150K
- $151K-$175K
- $176K-$200K
- $201K-$225K
- $226K-$250K
- $251K-$300K
- $301K-$350K
- $351K-$400K
- $401K-$450K
- $451K-$500K
- $501K-$600K
- $601K-$700K
- $701K-$800K
- $801K-$900K
- $901K-$999K

Salary Brackets

Start Exploring

▲ EXIT PATHFINDER   Version: 32d   Petr Sedy   SELECT PATH   Current Path Name   ▲   MANAGE PATHS

FIGURE 12L

Pathevo

○○○●●Engineering

Explore | Job Market | Curriculum Designer

BINDER | SEARCH

ADD TO BINDER | DECISION MAKER

No Data

Job Market

Geographical Region-
Career Pursuits

Geographical Region-
Education Pursuits

Job Titles/Job Functions/
Occupations

Engineering Disciplines

Education/Experience
Levels

Industry/Corporate
Sectors

☐ $61K-$70K

Salary Brackets - $61K-$70K

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▲ EXIT PATHFINDER | MANAGE PATHS

FIGURE 12M

Pathevo

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Explore | Job Market | Curriculum Designer

BINDER | SEARCH

ADD TO BINDER | DECISION MAKER

No Data

Industry/Corporate
Sectors
☐ Advertising, Marketing
☐ Aerospace
☐ Agriculture
☐ Apparel
☐ Automotive Retailing &
  Services
☐ Biotechnology
☐ Building Materials, Glass
☐ Business Services
☐ Communications
☐ Computer Equipment &
  Services
☐ Construction and
  Contractors
☐ Consumer Electronics and
  Household Products
☐ Defense/Military
☐ Diversified Outsourcing
  Services
☐ Drug Manufacturing
☐ Electronics, Electrical
  Equipment
☐ Energy
☐ Engineering Consulting
☐ Entertainment
☐ Environmental Products
  and Services
☐ Financial Institutions
☐ Food & Beverages
☐ Foundations and Non-
  Profits

Industry/Corporate Sectors

Salary Brackets - $61K-$70K

Start Exploring

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▲ EXIT PATHFINDER

FIGURE 12N

FIGURE 120

Pathevo

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Explore | Job Market | Curriculum Designer

BINDER | SEARCH

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No Data

Education/Experience Levels

☐ High School Diploma with 1 year Technical Experience (Technician Entry Level)

☐ High School Diploma with 10 yrs general experience (Senior Technician Level)

☐ Bachelor's Degree with Internship Experience (Professional Entry Level)

☐ Bachelor's Degree with 5 Yrs. General Experience (Professional Senior Level)

☐ Master's Degree with 10 years Management Experience (Professional Managerial Level)

☐ Doctoral Degree with 6 years Technical Experience (Professional Senior Managerial Level)

Education/Experience Levels

Industry/Corporate Sectors: Drug Manufacturing
Salary Brackets: $61K-$70K

Start Exploring

MANAGE PATHS

Version: 32d | Petr Sedy | SELECT PATH | Current Path Name ▲

▲ EXIT PATHFINDER

FIGURE 12P

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BINDER | SEARCH

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No Data

Job Market

**Geographical Region-
Career Pursuits**

**Geographical Region-
Education Pursuits**

**Job Titles/Job Functions/
Occupations**

Engineering Disciplines

Bachelor's Degree with
☐ Internship Experience
(Professional Entry Level)

Education/Experience Levels: Bachelor's Degree with Internship Experience
(Professional Entry Level)
Industry/Corporate Sectors: Drug Manufacturing
Salary Brackets: $61K-$70K

Start Exploring

MANAGE PATHS

Current Path Name ▲

Version: 32d | *Petr Sedy* | *SELECT PATH*

▲ *EXIT PATHFINDER*

FIGURE 12Q

FIGURE 12R

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Explore | Job Market | Curriculum Designer

BINDER | SEARCH

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No Data

US Sub-Regions in North East Region

☐ Middle Atlantic

☐ New England

All

☐ North East

Geographical Region-Career Pursuits:
Education/Experience Levels: Bachelor's Degree with Internship Experience
(Professional Entry Level)
Industry/Corporate Sectors: Drug Manufacturing
Salary Brackets: $61K-$70K

Start Exploring

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FIGURE 12S

Pathevo

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BINDER | SEARCH

DECISION MAKER

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No Data

US States in New
England Sub-Region

□ Connecticut
□ Maine
□ Massachusetts
□ New Hampshire
□ Rhode Island
□ Vermont
All

▲

□ New England

Geographical Region-Career Pursuits:
Education/Experience Levels: Bachelor's Degree with Internship Experience
(Professional Entry Level)
Industry/Corporate Sectors: Drug Manufacturing
Salary Brackets: $61K-$70K

Start Exploring

MANAGE PATHS

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▼ *EXIT PATHFINDER*

FIGURE 12T

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whole, it's an enjoyable combination of what's now and what came before.

Massachusetts

Massachusetts

From the wild seacoast that reached out to the Pilgrims to the stone walls that sheltered the Minutemen in 1775, Massachusetts has been the site of some of the defining moments in U.S. history. Not surprisingly, most visitors to the state go looking for things that will fulfill their vision of the past.

Happily, Massachusetts lives up to the preconceptions. Small towns are still chock-full of 200-year-old homes, square-rigged sailing ships still bob in the harbors and some excellent living-history museums let travelers stroll among the same sights, sounds and activities they would have found in centuries past.

This isn't to say that Massachusetts is all postcard views and well-preserved memories. It's as contemporary as any other state, with a thriving arts scene, bustling nightlife and a well-developed transportation system. Taken as a

Job Market
Job Titles/Job Functions/
Occupations
Engineering Disciplines

□ Massachusetts

Geographical Locations : Massachusetts
Geographical Region – Education Pursuits:
Geographical Locations : Pennsylvania
Geographical Region – Career Pursuits:
Education/Experience Levels : Bachelors Degree with Internship Experience
(Professional Entry level)
Industry/corporate Sectors : Drug Manufacturing
Salary Brackets : $61K-$70K

Version: 32d   Petr Sedy   SELECT PATH   Current Path Name ▲

Start Exploring

MANAGE PATHS

◄ EXIT PATHFINDER

FIGURE 12U